

**Amendment and Response**

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Serial No.: 09/438,206

Confirmation No.: 9018

Filed: November 12, 1999

For: METHODS AND COMPOSITIONS FOR TREATING MAMMALIAN SPINAL CORD INJURIES

**Amendments to the Claims**

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1-22. (Canceled)

23. (Currently Amended) The method according to claim [[22]] 45 wherein said spinal cord is severed.

24. (Currently Amended) The method according to claim [[22]] 45 wherein said spinal cord is crushed spinal cord.

25. (Currently Amended) The method according to claim [[22]] 45 wherein said polyalkylene glycol is selected from the group consisting of polymethylene glycol, polyethylene glycol, polypropylene glycol, polybutylene glycol, polypentylene glycol, polyhexylene glycol, polyheptylene glycol, polyoctylene glycol, polynonylene glycol, polydecylene glycol and mixtures, thereof.

26. (Previously Presented) The method according to claim 25 wherein said polyalkylene glycol is administered to said patient in a pharmaceutically acceptable carrier.

27. (Previously Presented) The method according to claim 26 wherein said polyalkylene glycol is selected from the group consisting of polyethylene glycol, polypropylene glycol and mixtures thereof.

28. (Currently amended) The method according to claim [[22]] 45 wherein said polyalkylene glycol is polyethylene glycol.

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29. (Previously Presented) The method according to claim 26 wherein said polyalkylene glycol is polyethylene glycol having a molecular weight ranging from about 40 daltons to about 3500 daltons.

30. (Currently amended) The method according to claim ~~[[22]]~~ 45, wherein said polyalkylene glycol is polyethylene glycol and wherein said method further comprises the step of contacting said injured spinal cord with a synergistic amount of 4-aminopyridine and within an effective time of contacting said spinal cord with said polyethylene glycol so as to produce a synergistic increase in restoration of nerve function and reflex behavior in said patient.

31-38. (Canceled)

39. (Currently amended) The method according to claim ~~[[38]]~~ 46 wherein said polyethylene glycol has a molecular weight ranging from about 40 daltons to about 3500 daltons.

40. (Currently amended) The method according to claim ~~[[38]]~~ 46 further comprising the step of contacting said injured spinal cord with a potassium channel blocker in the form of 4-aminopyridine in an effective amount and within an effective time of contacting said spinal cord with said polyethylene glycol.

41-42. (Canceled)

43. (Previously Presented) The method according to claim 40 wherein said polyethylene glycol has a molecular weight ranging from about 40 daltons to about 3500 daltons.

44. (Currently amended) The method according to claim ~~[[22]]~~ 45 or ~~[[38]]~~ 46 wherein the

restoration of nerve impulse conduction is evidenced by a detectable increase in conduction action potentials, observation of anatomical continuity, restoration of more than one spinal root level, or an increase in reflex behavior.

45. (New) A method of treating a mammalian patient having suffered an injury to its spinal cord, said method comprising contacting the injured spinal cord after the injury but within a period no greater than about 24 hours after said injury with a composition comprising an effective amount of at least one C1-C10 polyalkylene glycol, wherein the effective amount of at least one C1-C10 polyalkylene glycol is effective to restore nerve impulse conduction through said injured spinal cord, and wherein the effective amount of at least one C1-C10 polyalkylene glycol is at least about 40% by weight in the composition.

46. (New) A method of treating a mammalian patient having suffered an injury to its spinal cord, said method comprising contacting the injured spinal cord after the injury but within a period no greater than about 24 hours after said injury with a composition comprising an effective amount of polyethylene glycol, wherein the effective amount of polyethylene glycol is effective to restore nerve impulse conduction through said injured spinal cord and wherein the effective amount of polyethylene glycol is at least about 40% by weight in the composition.

47. (New) A method of treating a mammalian patient having suffered an injury to its spinal cord, said method comprising contacting the injured spinal cord after the injury but within a period no greater than about 24 hours after said injury with a composition comprising at least one C1-C10 polyalkylene glycol in an amount effective to restore nerve impulse conduction through said injured spinal cord, wherein the composition does not contain benzyl alcohol, and further comprising contacting said injured spinal cord with a synergistic amount of 4-aminopyridine and within an effective time of contacting said spinal cord with said

polyethylene glycol so as to produce a synergistic increase in restoration of nerve function and reflex behavior in said patient.

48. (New) A method of treating a mammalian patient having suffered an injury to its spinal cord, said method comprising contacting the injured spinal cord after the injury but within a period no greater than about 24 hours after said injury with a composition comprising polyethylene glycol in an amount effective to restore nerve impulse conduction through said injured spinal cord, wherein the composition does not contain benzyl alcohol, and further comprising contacting said injured spinal cord with a potassium channel blocker in the form of 4-aminopyridine in an effective amount and within an effective time of contacting said spinal cord with said polyethylene glycol.

49. (New) The method according to claim 47 or 48 wherein the restoration of nerve impulse conduction is evidenced by a detectable increase in conduction action potentials, observation of anatomical continuity, restoration of more than one spinal root level, or an increase in reflex behavior.